Relating Divergent Worlds: Mines, Aquifers and Sacred Mountains in Peru

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Abstract: This article examines a conflict over the expansion, into Cerro Quilish (Mount Quilish), of the Yanacocha gold mine, in Northern Peru. In campaigns against the mine, Cerro Quilish was an aquifer (a store of life-sustaining water) and an Apu (usually translated from Quechua as "sacred mountain"). Neither the product of ancestral tradition nor the invention of antimining activists, Cerro Quilish came into being through knowledge encounters that brought together actors with diverse interests, although at times a single entity—water—became the central focus of debate, obscuring other realities. Drawing on science and technology studies literature, I examine the practices that bring entities into being and argue that contemporary conflicts involve an ongoing process of contestation over socionatural worlds.

Keywords: mining, water, social movements, environmental conflict, Peru

Résumé: Cet article s'intéresse à un conflit portant sur l'expansion de la mine d'or Yanacocha dans le Cerro Quilish (mont Quilish), au nord du Pérou. Dans les campagnes contre la mine, le Cerro Quilish était à la fois un aquifère (une réserve d'eau porteuse de vie) et un Apu (qu'on traduit habituellement du quechua comme « montagne sacrée »). Alors qu'il n'est ni le produit d'une tradition ancestrale ni l'invention des militants anti-mines, le Cerro Quilish a vu le jour par des rencontres de savoir réunissant des acteurs aux intérêts divers, bien qu'avec le temps une entité unique—l'eau—est devenue l'enjeu central des débats, cachant à la vue les autres réalités. Puisant dans la littérature des études des sciences et technologies, j'examine les pratiques qui amènent les entités à l'existence et soutiens que les conflits contemporains impliquent un processus continu de contestation des univers socionaturels.

Mots-clés: industrie minière, eau, mouvements sociaux, conflit environnemental, Pérou

Introduction

n the morning of 2 September 2004, protestors marched to Cerro Quilish (Mount Quilish), in the Northern highlands of Peru, to demand an end to mining exploration activity. At the peak of the 15 days of protesting, more than 10,000 people filled the town square in the city of Cajamarca, 18 kilometres from Cerro Quilish. As many would later remark, the defence of Cerro Quilish united the city and countryside, bringing together a diverse mix of people: urban professionals, irrigation canal users' associations, Rondas Campesinas (peasant "patrol" groups, one of the backbones of peasant political organizing in Peru), unions, students, religious organizations and other groups. The massive protests put a halt to the extraction of an estimated 3.7 million ounces of gold from Cerro Quilish. The proposed project was to be an extension of the Yanacocha mine, which was opened in 1993 and was already the largest gold mine in Latin America.¹ The mine is operated by Minera Yanacocha, a joint venture of the US-based Newmont Mining Company (with 51.35 per cent of shares), the Peruvian company Buenaventura (43.65 per cent shareholder), and the financial branch of the World Bank (with a remaining 5 per cent of the shares).

On the surface, the Quilish protests shared many characteristics with other mobilizations that emerged in the late 1990s and would intensify in the 2000s in response to mining expansion in Peru and elsewhere in Latin America (see Bebbington 2009). In this context of increased mining-related activism, the Quilish protests stand out not only because they effectively stopped the project but also due to their long-lasting impact on the popular imagination and political debates around mining activity in Peru. Like other mining-related conflicts, the controversy over the Quilish project centred on the costs and benefits involved in converting mountains into openpit mines. But what made this case different was that Cerro Quilish emerged in the conflict as a particular kind of mountain: one that holds water and has special

significance for the local population. In antimining campaign materials and news reports, Cerro Quilish was presented as an aquifer—the source of the main rivers and tributaries that supply water to the city and rural communities. Activists argued that mining activity would compromise the quality of that water (due to increased sedimentation and the potential leaching of heavy metals and toxic substances into rivers and streams) and reduce the quantity of water available in what is already a drought-prone region. Protestors also argued that the mine should not be built because *campesinos* (peasant farmers) living in the area considered Cerro Quilish to be an *Apu*, a Quechua term that is commonly translated as "mountain spirit" or "sacred mountain."

Framed around the protection of an aquifer and an Apu, the aims and strategies of the antimining protests did not always fit within the discourses of existing political movements focused on economic justice or the nationalization of resources (e.g., local unions or left-leaning political parties). While arguments calling for nationalizing the mines or better pay and working conditions did surface in conflicts emerging throughout the country, activism against mining at once incorporated and exceeded established political discourses and practices. The Quilish protests became part of a movement "in defence of life" that encompassed water and livelihood, landscapes and cultural identity—but it was also more than this. The mountain was not just an economic resource to be defended but the embodiment of life itself. By calling Cerro Quilish an Apu, the protestors suggested that it was a living entity and, furthermore, that other lives (both human and nonhuman) depended on its existence. Arguments against mining in Cerro Quilish were entangled with discussions about water as a lifesustaining substance—life in a general biological sense but also with relation to the particular (and by some accounts, disappearing) ways of life in the campo (countryside). In addition, the mining industry's new ventures in Cajamarca and other parts of the country were coming up against unexpected forms of life: not only the animal and plant species deemed valuable by local people and environmentalists but also entities like Apus and other earth-beings that animate the Andean landscape. The invasive technologies of open-pit mining were disrupting landscapes and, along with them, the conditions necessary to sustain ways of living and interacting with those landscapes.

This article examines how Cerro Quilish emerged as an Apu and an aquifer in campaigns against the mine. As Blaser (2009) and de la Cadena (2010) have noted, many contemporary environmental conflicts are conflicts over different realities or worlds. The conflicts do not simply concern competing interpretations of Nature (which assumes the existence of many cultures but a single reality) but should be understood as struggles over the enactment, stabilization and protection of multiple socionatural worlds. In the conflict I examine here, Cerro Quilish was not only a mountain or a resource, nor was it simply *perceived* in different ways by the various constituencies involved in the controversy. Rather, it emerged as radically different entities—a valuable mineral deposit, a mountain that holds water, a sacred mountain and sentient being—through the practices of the actors involved.

I argue that recognizing Cerro Quilish's multiplicity can help us understand the dynamics of conflicts over mining. First, examining the controversies that brought Cerro Quilish into being—a perspective inspired by what Blaser (2009) and others call political ontology can contribute to discussions about how natures and knowledges are made. I draw here on the work of scholars of science who have shown that entities in the world are not fixed or constant but are the effect of practices and require continuous enactment and stabilization (Law 2004; Mol 2002).2 If a particular entity "hangs together," it is not because its coherence "precedes the knowledge generated about it, but because the various coordination strategies involved succeed in reassembling multiple versions of reality" (Law and Mol 2002). In the conflict I focus on here, we cannot simply take Cerro Quilish for granted as an element of a preexisting "reality-out-there" (Law 2004) or take as given its recognition as Apu or aquifer. Cerro Quilish's complex forms came to matter through knowledge encounters that brought together campesinos' experiences of a sentient landscape, Catholic sermons, hydrological studies, radio campaigns, geological explorations and antimining activism.

My use of the term *matter* refers to how elements of the landscape acquire political significance and become the focus of public concern. It also refers to the ways in which things take form and come to be known and experienced, as well as ongoing efforts required to solidify them into "facts." As scholars of science have noted, political theory has tended to focus on human agency while casting nonhumans out of the political sphere (see for example, Latour 1993). Thus, we tend to think of anything nonhuman (including the things of nature, such as mountains, minerals or water) as a resource or tool that enters political theory "only to the extent that it has instrumental value, but not in terms of its constitutive power" (Braun and Whatmore 2010:xv). Recognizing the ability of things to condition political life, I do not treat Cerro Quilish simply as a contested resource;

rather, I examine the kinds of politics that it enabled (and at times precluded) as it came into being as an aquifer and an Apu.

The Quilish conflict illustrates that political responses to mining activity in recent years do not simply cohere as "antimining" social movements. Mobilizations are loosely organized around multiple demands and involve a diverse group of actors. Significantly, demonstrations have been held in support of mining companies and not just against them. Participants involved in various kinds of mobilizations do not necessarily share common interests or an ideological stance that defines their position vis-à-vis extractive activity. My analysis of the Quilish conflict seeks to show how various actors came together in ways that strengthened the movement, in spite of their different interests and positions. At other times, different interests can lead to unpredictable effects. For example, the importance of Quilish as an aquifer helped make water into a focal point of debates over mining—not only in this conflict but in subsequent ones as well. While these arguments helped draw supporters to the movement against the mine, they also led the mining company to focus its public relations campaigns on technical arguments and water management programs. What I argue is that focusing on a single aspect of Cerro Quilish (water) reduced the complexity of the mountain and the challenge that it posed for the company. The shift from multiplicity to singularity helped neutralize opposition to the project. But, as I have already noted, the stabilization of facts requires constant effort. Thus, the potential for multiplicity remains, and conflicts that might seem to have been resolved are likely to reemerge.

The research presented in this article is based on two years of ethnographic research in Peru in 2005 and 2006. Although the article focuses on the Quilish controversy, the material I draw on is part of a larger project on conflicts over mining activity that intensified as a result of neoliberal reforms in the 1990s. As conflicts proliferated in Cajamarca and various other parts of the country, the significance of Cerro Quilish and continued tensions in Cajamarca led me to focus my fieldwork on the Yanacocha mine. Although I was based in the city of Cajamarca, I also conducted fieldwork in campesino communities in Porcón, the area where people responded most strongly against the Quilish mining project. Material for this article comes from participant observation, the analysis of documents related to the Quilish project and interviews with key leaders, activists and others who participated in the Quilish protests.³

The article is organized as follows. In the first part, I examine how a Catholic priest emerged as a key figure in the conflict and played a crucial role of translation that merged religious and scientific knowledges with the lived experiences of campesinos in the region. By emphasizing Cerro Quilish's multiplicity, the Quilish campaigns shifted the focus of debates on mining and enabled new forms of political activism. In the second part of the article, I describe how Cerro Quilish, as Apu and aquifer, enabled the antimining campaigns to travel from the local through regional, national and transnational networks. The campaigns tapped into, connected with and modified existing campesino knowledge practices that recognized the qualities of Cerro Quilish as an animate being and a source of water.

In the final part of the paper, I examine the company's attempts to narrow the scope of the Quilish debate by focusing it on water and its technical management. Protestors challenged this definition of Cerro Quilish as a resource to be managed; yet, the issues around water quality and quantity were ones that they helped introduce into the debate. I suggest that the ongoing conflicts around mining in Cajamarca attest to the unstable nature of objects as they emerge and change form through environmental controversies.

How Quilish Became an Apu and Aquifer

The protests over Cerro Quilish brought mining conflicts (a now-ubiquitous term) into the popular consciousness in Peru at a time when mineral extraction was being subjected to increasing public scrutiny. In 2003, the Tambogrande mining project in the department of Piura was brought to a halt after significant opposition and a concerted local and international campaign that included a popular referendum. In addition, conflicts in the smelter town of La Oroya and other mining centres began to receive more attention in the news media. In Cajamarca, complaints against Minera Yanacocha—from lands usurped from campesinos, to fish deaths and diminished water flows in irrigation canals—had been accumulating since the mine began operating. However, it was in 2000 that the company faced its biggest setback, with a mercury spill in the town of Choropampa, which was considered to be the largest mercury spill in the world. These events put in doubt the image of modern mining that the industry and government tried to promote: an image of safety, environmental responsibility and local development.

In this climate of increasing tensions between communities and Minera Yanacocha, the Cerro Quilish project proposal came to the fore. Educational materials distributed as part of the campaign to stop the project pointed out that Cerro Quilish and the city of Cajamarca are separated by a distance of a mere 14.5 kilometres as the crow flies. People also argued that Cerro Quilish was

only eight kilometres away from the city's water treatment plant, "El Milagro," and was the source of the Porcón and Grande Rivers, which together provided 70 per cent of the water consumed in the city. At least four campesino communities were considered to be within the area of the proposed Quilish project, but many more relied on irrigation canals and water springs that originate at Cerro Quilish. The protests against the mining project emphasized these various connections between people and bodies of water emerging from Cerro Quilish, thus securing the support and participation of a large segment of the rural and urban population.

Political activism against mining at Cerro Quilish did not erupt spontaneously but was the result of tenacious education and advocacy campaigns that spanned almost a decade. Spearheading these efforts was the NGO Grufides—and, in particular, Father Marco Arana, one of its founding members. Grufides is a small development organization that was formed in 2001 by recent graduates of the Universidad Nacional de Cajamarca (Cajamarca National University) under the guidance of Father Arana, who directed the University Parish. As in much of Latin America, liberation theology has been a significant influence for NGOs and individuals whose work merges Christian teachings with issues of economic justice, human rights and (more recently) environmental concerns.⁴

Father Arana, as well as other professionals from the city of Cajamarca, wrote extensively against Minera Yanacocha's continued expansion, pointing out the risks of cyanide leaching (Deza 2002) and evidence of water contamination from mining operations already underway (Seifert 2003). But it was Father Arana who, in numerous newspaper editorials, email missives and published reports, imbued the technical arguments against mining with what he saw as a cultural and moral dimension to the struggle against the mine. He based his arguments on the defence of a way of life rooted in a place called Porcón, an area made up of campesino communities that begins just beyond the city of Cajamarca and extends into the property of the mine. His experiences as a rural priest made him attuned to the hardships of campesinos and their particular ways of expressing their identity as "porconeros" (as the area's locals are called).

Undoubtedly, the effectiveness of narratives that centred on Cerro Quilish's role as aquifer and Apu rested on its seemingly timeless qualities. Since the mineral deposit was located in Porcón, a place that had become emblematic of a pre-colonial past, these narratives presumed that locals had always considered Cerro Quilish to be the primary source of water for the city

and surrounding region and implied that it was an Apu according to "Andean tradition." On the other hand, counter-claims to disprove the validity of these arguments dismissed them as "inventions" with the intent to manipulate. Yet, both of these views ignore the dynamic and creative connections among people, technologies and landscapes that brought Cerro Quilish to the centre of a complex controversy.

This is the irony of Cerro Quilish: that its protagonism as an Apu took shape in a region where many people have turned to evangelism and where a Catholic priest became one of its most important spokespersons. It took a proposed mining project—with the threat of open pits, toxic chemicals and altered water courses to make the latent "indigeneity" of Porcón and people's relationships to a sentient landscape politically visible and significant in the present. I use the term indigeneity recognizing the complex politics of class, language, ethnicity and race in Peru. First of all, the term indigenous is not used by people in rural Cajamarca (who tend to refer to themselves as campesinos). Also, I do not mean to suggest that people are more or less indigenous based on a set of prescribed characteristics (e.g., language or dress). As scholars have pointed out, we need to "move beyond thinking of indigeneity in the all-or-nothing terms of authenticity and invention, cultural survival and extinction" (see Garcia 2005:6). Recognizing the complex ways in which identities are made and negotiated, I want to explore how indigeneity came to be articulated through the engagement of various actors.

"Quilish is more than Quilish"

Three years after the 2004 protests, Father Arana wrote an article reflecting on the significance of the campaigns against mining at Cerro Quilish and asserting his unwavering commitment to protect it:

If the ecological matter put forth by the avarice of gold that has laid eyes on Cerro Quilish is to be understood as merely a technical-scientific problem, then I'll always say no. And I'll do the same if these questions are reduced to problems of a cultural, social or religious-symbolic character. It is not with these half-truths that life will be protected and defended, but rather with the understanding and practice of ecology as an integral matter: scientific, cultural, social, political, historical, and ethical. [Arana 2007]

For Farther Arana, the Quilish conflict could not simply be addressed with technical solutions. If the controversy were to be considered from an *ecological* point of view, in his definition of the term, it would be necessary to take a holistic approach that incorporated the scientific, socio-cultural, political, historical and ethical issues at stake. Considering one of these dimensions separately, without seeing the larger whole, would only produce "half-truths." Rejecting the perils of reductionist thinking, Father Arana wrote that "Quilish is more than Quilish." What was at stake in the protests, he explained, was not only the protection of this mountain; the defence of Quilish was also linked to the protection of local people's right to water, their cultural identity and the democratic right to prior consultation (Arana 2007). Evoking Cerro Quilish's multiplicity was fundamental for making the struggle known nationally and internationally.

Although he tried to play down his leadership role, no other individual has had as much of an impact on mining debates in Cajamarca or incited as much controversy as Father Arana. Father Arana was born in the city of Cajamarca, and his understanding of Cerro Quilish and its meaning for local people was shaped by a long relationship with rural communities that began with his appointment as parish priest in Lower Porcón in 1991. During his time as a rural priest, Father Arana made contact with people and established a reputation in the countryside that would last beyond his years in Porcón. His position as a trusted authority figure allowed him to hear firsthand about campesinos' initial altercations with the mining company and to intervene on their behalf. In the process, his day-to-day experiences in rural communities convinced him that Cerro Quilish was more than what could be captured by the utilitarian value of the resources it provided (land, water, pasturelands, etc.) and that might be compromised by mining activity. Campesinos told him they had always known Cerro Quilish contained gold and water and spoke of a "golden fountain" from which water sprung and flowed in two directions (Arana 2007). This, according to Father Arana, was an apt description of Cerro Quilish's location in the area of the continental divide separating the watersheds that drain into the Pacific and Atlantic oceans. They also told of how, if the first clouds of October appear above the crown of Cerro Quilish, it would be a year of heavy rains and bountiful harvests (Arana 2007). For Father Arana, the significance of Quilish was evidenced in the stories passed on from generation to generation and in the little "altars" made of rocks where campesinos would bring holy water, liquor, peppers, salt, candles, strands of lamb's wool or little pieces of leather. "They prayed first to God Almighty, Father of Jesus Christ, and then came the libations and offerings to the earth with trickles of water" (Arana 2007), he wrote, translating the practices

of campesinos according to his understanding of religion. In this way, Cerro Quilish became a *sacred mountain*, a term that caught on in the media yet differed from what Cerro Quilish was to campesinos: an agentive being with whom people interacted and established relationships necessary to sustain life.

Like many priests working in the Peruvian country-side since the colonial period, Father Arana accepted the coexistence of Catholic saints and sentient entities, of special offerings left in rocky caves and processions in honour of Christ (like the Cristo Ramos celebrations held annually in Porcón). In his writings and reflections on Cerro Quilish, Father Arana seemed to tap into a consciousness of a world in which such mixtures were still possible, even if they were not always evident in peoples' everyday lives. In Porcón, Apus did not have the prominence that they do in the southern department of Cuzco, for example, where some mountains are the focus of yearly pilgrimages or recognized as important protectors.

In the Cajamarca region, by contrast, the influence of Spanish colonialism prevailed over many pre-colonial practices. The indigenous Quechua language is spoken only in a few communities, and a significant number of rural people attend the evangelical churches that now predominate in the region. As in other parts of Peru and Latin America, evangelical Protestantism has grown rapidly since the 1960s. According to the 2007 departmental census, 14 per cent of the population professes an evangelical religion (compared to 80 per cent who identify as Catholic). While this is a relatively small percentage, the rapid inroads made by evangelical religions in Porcón is evidenced by the proliferation of non-Catholic Christian churches. Also, since many Catholics are nonpracticing and regular church services are not available in each community, the majority of active churchgoers are evangelicals. Evangelism has had a significant influence on most aspects of everyday life, from politics and community leadership to personal habits, including the avoidance of alcohol. Evangelism also discouraged any practice that could be seen as violating its monotheistic teachings (e.g., making offerings to the dead or being fearful of places where earth-beings are said to hide).

It was in this setting that Father Arana argued Cerro Quilish was not only a mountain and not just a source of water. It was an Apu and a source of life. This message became part of his writings, interviews and sermons delivered during events organized in the defence of Cerro Quilish. The following are fragments of a homily given on Cerro Quilish during a march in August 2001:

Quilish, for campesinos here, is still the APU, the mountain that is protector of all earthly and heavenly life. Pantheist paganism, might say those who do not understand that the campesino's relationship with nature, is the delicate thread that sustains all life.... Quilish is about to be seized from us, the destiny that the miners want to give Quilish is to transform it into some millions of dollars that will fill their pockets, without regard for the many people for whom Quilish is a source of water and, therefore, a source of life. Today we are here to tell ourselves, in the presence of God, that we renounce the avarice of gold; and that we will not allow others to transform our source of water into a handful of gold to satisfy their greed; that we will not permit that their idolatrous way of life, in which everything is sacrificed to a gold idol, continues without regard for how many lives depend on this, our source of water, (Arana 2002)

According to Father Arana, for "the miners" (meaning those involved with the mining company and more generally, its supporters), Cerro Quilish was a source of minerals and profits. That it could also be an Apu and an aquifer allowed for the moral condemnation of the materialism and greed that went along with the "idolatry of gold."

In addition Quilish's identity as an Apu challenged any arguments that justified mining activity based on economic calculations about the utilitarian value of resources. The fact that Quilish was an Apu made it incommensurable, in the sense that it was irreducible to gold or other forms of material benefits. The question ceased to be, How can Cerro Quilish be mined responsibly? (as the problem is often framed by corporations promoting an image of "Corporate Social Responsibility"); nor could the dispute be described simply as a disagreement over how communities would "benefit" from the project. The multiplicity of Cerro Quilish disrupted the equivalences at the root of proposals to "manage" the impacts of mining activity with technological solutions and compensation agreements with affected communities.

Father Arana's interpretations of Catholicism and of campesinos' relationships with Cerro Quilish were certainly controversial, and many accused him of being a "false prophet" and of introducing the idea of the Apu where it had never previously existed. Yet, the binary opposition between "authentic" indigenous tradition, on the one hand, and invented (and thus "fraudulent") interpretation, on the other, does not capture the way Cerro Quilish came to matter as both an Apu and a source of water. Father Arana's arguments were controversial precisely because they disrupted a "modern" understanding of politics, which stems from the separation of society and nature (Descola and Palsson 1996) and

relegates politics to the representation of humans (society) and science to the representation of nonhumans (nature). This distinction rests on what Latour (1993:13) calls the "crossed-out God, relegated to the sidelines." Through the process of purification (the ever-increasing separation of society and nature), God was separated from the realm of the profane and relegated to the sphere of "spirituality," where it could not intervene in worldly affairs. God was made transcendent and also irrelevant and, thus, did not pose a threat to the rationality of science.

In protests against mining expansion and subsequent media coverage of these events, activists and journalists sometimes defined Cerro Quilish according to a Catholic conception of the "sacred" or a romantic vision of ancestral knowledge and relegated it to a "spiritual" dimension detached from its material properties. It could be said that Father Arana did this also and simply incorporated the idea of the Apu into his own (modern) understandings about Catholicism and environmentalism. In Father Arana's translation, an Apu is a "sacred mountain" according to "local beliefs"; this maintains the dualisms that keep earth-beings (and the worlds to which they belong) in the sphere of spirituality. Treated as belief, Cerro Quilish does not pose "an epistemic alternative to scientific paradigms (ecological or economic)" (de la Cadena 2010:349), making it easier to dismiss from politics.

However, it could also be said that Father Arana tried to reject reductionist analyses that interpreted the defence of Cerro Quilish in terms of two incompatible spheres: that of the mythical, spiritual, romantic and ideological or that of the technical and scientific (Arana 2007). By refusing this ontological separation, Father Arana connected the plane of the secular with that of sentient entities like Apus and infused his critique of capitalist mining with both religious teachings on morality and hydrological studies of aquifers. Thus, it could be said that Father Arana brought the "crossed-out God" back into the world of the secular (and, hence, into the realm of politics), making it impossible to settle the controversy solely through economic, technical and scientific arguments.

The campaigns in defence of Cerro Quilish evoked an animate landscape that was part of campesinos' experiences of the Cajamarca countryside. People's relationship to the beings that populated that landscape was not always expressed in everyday practice; nevertheless, it inspired the campaigns against mining at Cerro Quilish and contributed to its success. I went to Porcón with the hope of understanding people's relationships with the neighbouring mine, the resources that enabled their

subsistence and the mountain that had become so emblematic in debates over mining. I describe these experiences in the next section of the article to show that knowledge is not anchored in timeless, ancestral traditions but is constantly made through encounters and collaborative practices.

Knowledge Encounters in Porcón

In Porcón—a group of communities located along the main highway leading up to the Yanacocha gold minepeople's relationships with the mining company oscillated between dependence and rejection, resistance and cooperation. On the one hand, being part of Minera Yanacocha's "area of influence" made these communities eligible to receive various forms of support, from donations of classroom supplies to the primary school, to potable water projects, improved irrigations canals and electrification projects. On the other hand, the company's promise of employment and development went along with the recognition that mining could radically alter the landscape and ways of life, including the availability of water resources. The water used in many of these communities (for domestic and agricultural activities) originates in Cerro Quilish, and it is for this reason that many people from the area participated in the 2004 protests against the mine's expansion.

Porcón's distinctive characteristics—particularly its festivals, communal agricultural practices and artistic traditions, such as weaving and stonework—captured the imagination of urban intellectuals, NGOs, artists and activists, especially those critical of the mine. My initial contacts in Porcón were made through one such individual, Ernesto, whose fascination with what he termed the "Andean world view" (la cosmovisión andina) inspired his involvement in the Quilish campaigns. In one of our conversations, Ernesto explained to me that in spite of high rates of conversion to Adventism, this cosmovisión was something that people in Porcón carried with them and expressed in subtle ways, even if they had to outwardly behave according to evangelical teachings (which included strict codes for dress, diet and behaviour). Just as evangelical Christians could no longer participate in the Catholic festival of Cristo Ramos but still watched from a distance, he told me, the fact that people could not talk about the sun and water being "sacred" did not mean that people did not treat them as such. His enthusiasm for my plan to carry out fieldwork to learn more about life in the campo led me to Cochapampa, a small caserío or hamlet consisting of some 80 families that is part of Upper Porcón.

Scientists and Mountain Spirits

In Cochapampa, children and adults told me many stories about good and evil mountains, creatures that emerge from water springs at night, places one should not venture for fear of losing his or her spirit (ánimo), the dangers of rainbows, and the plants that cure susto (literally "fright," which afflicts young children in particular, when travelling in dangerous areas). Sometimes, I would ask about Cerro Quilish, thinking that people's stories could help me understand why so many had joined forces in its defence. Most of the stories I heard were not about a benevolent protector that might correspond to an environmentalist narrative or to the image of a "sacred mountain" that tended to surface in campaigns against mining. Instead, they were about harmful spirits lurking in caves and water springs, especially in mountains that, like Cerro Quilish, concealed precious minerals and other treasures to entice humans into the underworld where evil spirits reside.

These stories coincide with those in a monograph by anthropologist Ana de la Torre (1986) titled Los dos lados del mundo y del tiempo, which is based on research conducted in communities around Cerro Quilish between 1979 and 1980. Her informants described a Shapi, a being that emerges from the underworld through tunnels that end at water springs. From these water springs, the Shapi waits for its victims to steal their ánimo, tempting them with the promise of sweets, gold coins, livestock and other offerings. "Bad" mountains are those associated with the source of rivers and water springs, since water is considered the property of the Shapi. The danger of the Shapi lies in its evil intentions as well as its ability to fascinate and entice humans with promised gifts; this contradictory nature, the tension between danger and desirability, destruction and fecundity, is what produces the natural order.

When I asked about Cerro Quilish and the community's sources of water, people explained to me that the water used in Cochapampa came from the Kunguna, a small mountain with a distinctive rock façade, and the water from the Kunguna came from Cerro Quilish. Mount Kunguna was considered one of those places that one ought to approach with care, since the presence of water springs and the entities that could emerge through them could bring danger to those who ventured near them. People described the beings that emerged from the water springs as demons or evil bird-like creatures. One day I walked to the Kunguna with a group of school kids, up to the top where a wooden cross was decorated with flowers and offerings from the few practicing Catholics who have not converted to evangelism.

As we climbed on the rocks and explored Kunguna's caves, a teenage boy in the group told us, "At midnight, the mountains talk to each other."

During my time in Porcón, people's stories and accounts made evident their detailed knowledge about the location of water springs, the flow of rivers, the routes of irrigation canals and other details pertinent to their agricultural livelihoods. But my conversations with people also reminded me that the intimate, lived experience of everyday life that is often conceived as "local" knowledge, is always born from encounters (Lowe 2006; Raffles 2002; Tsing 2005). Anthropologist Julie Cruikshank explores three different types of knowledge encounters in her account of the socionatural history of glaciers in Alaska: encounters take the form of actual meetings between strangers; they are interactions between humans and a rapidly changing landscape; and they concern ongoing exchanges between stories and their subsequent readers and listeners (2005:16). Similarly, some of the knowledge encounters that shaped the socionatural history of Porcón include interactions among porconeros and state agents, Catholic priests, evangelical missionaries, NGOs and mining engineers. But knowledge encounters also involve elements of the surrounding landscape (both before and after mining's transformative effects) and the animate entities that make that landscape. Furthermore, encounters take place as stories about Cerro Quilish travel outside Porcón and when these stories become translated, reinterpreted and perhaps reincorporated into different knowledge practices. I learned about these multiple encounters during a conversation with Margarita, a 29year-old mother whose husband worked at the mine. As we chatted in her house, we were joined by her 12year-old son, Jaime. Jaime liked telling me stories about devils inhabiting the Yanacocha mine, which he had heard from his father and uncle who worked there. I asked Margarita what she knew about Cerro Quilish.

Margarita: The water that we drink comes from Quilish, they say. They say that, in Quilish, there's a lagoon inside, which rises every which way.

- F: Who says this, the elders?
- M: The scientists. They study it, that's why they say this. This is what they tell us.

Jaime: It's also on the radio.

- M, J: They talk to each other. The devils talk to the gringos.
 - J: [Mount] Kunguna also talks to [Mount] Aliso.
 - M: And Aliso talks to Quilish.
- J: They recorded this, when they talked and they play it on the radio. They speak in Quechua, in English.
 - F: What else do the scientists say?

- M: Quilish has a lagoon inside, they say. It springs every which way.
 - F: That's where the water comes from?
- J: Yes, it springs from the foot of the mountain. There they made a reservoir and then it comes through the pipes. That's where they take the potable water and it reaches our house.
- F: So this water from the tap comes from Cerro Quilish?
 - M: That's what they say. A lagoon, they say.
- F: Before you heard it on the radio, did people tell stories about Cerro Quilish?
- M: No, we hear them on the radio. "Quilish is life." If it's mined the water will be contaminated and we'll die, like chickens [laughs].
 - J: There used to be frogs, but these are dead now.
- M: There are no frogs now; before there were, green ones.
 - J: Now the mine has contaminated them.
- M: On the path, you'd find them ... it's been seven, eight years that there aren't any. I used to be afraid to walk there; we'd find the little frogs, around the rocks, green ones.

Margarita went on to recount some stories her grandfather had told her, about mountains that contained gold. I asked if her grandfather had also told her stories about Cerro Quilish, and she replied:

They used to say Cerro Quilish was evil. It would eat you. Yanacocha couldn't get there, the water springs would suck you in. Quilish was such an evil one! Little boys would die, dried up. But not anymore. It's become tame. I don't know how. Now we can get there, we're not afraid at all. Before they used to believe, our grandparents... And because of their beliefs, the children would die. But now we know the word of God and we don't believe anymore [in evil spirits]. We're not even afraid.

Margarita's account combines her grandfather's stories and NGO campaigns against mining with her own observations of water springs at the foot of Cerro Quilish and the experience of walking on paths full of frogs to the nearby community of Chilimpampa (named after the *chilin*, one of the types of frogs commonly found in the area). Many campesinos commented on the absence of frogs as a consequence of mining activity, and this concern was picked up by environmentalist campaigns and the mine's own counter-campaigns. The "scientists" she mentions could refer to members of local NGOs or to international consultants who went to Cajamarca to lend support to the Quilish campaigns. For example, a public event held in March 2004 to

present observations to Yanacocha's Environmental Evaluation Study included the participation of members of the NGO Grufides, a lawyer from Lima and an environmental scientist from Belgium. Radio spots, printed materials and educational workshops run by NGOs usually made reference to studies carried out by local and international organizations, even though the information was translated into nontechnical language. Thus, the "lagoon" refers to scientific descriptions of Quilish as an aquifer that holds water, but this idea merged with stories told in Andean communities about large subterranean lakes that exist beneath mountains. While rivers, lakes and water springs are obvious sources of water, mountains themselves can also be considered sources of water, even if they show no evidence of being so (Sherbondy 1998:229).

Jaime and Margarita attributed their knowledge about Cerro Quilish to what they heard on the radio, but in their accounts, the radio spots (produced by NGOs to raise awareness about mining) became entangled with their own conceptions about mountain beings. Mountains have human qualities and "talk to each other." They referred as well to versions of stories about gold-bearing mountains and greedy individuals who meet a tragic fate when they are confronted by evil spirits. In recent versions of this oft-told story, the "gringo" perpetrators are North Americans and Peruvians from the capital city working for Minera Yanacocha. The NGO campaigns drew from these stories to reach a rural audience, even though, as Margarita claims, people who converted to evangelism "don't believe" in them anymore. At the same time, she continued to attribute agency to Cerro Quilish when she explained that the reason Cerro Quilish no longer harms people is that "it's become tame."

The stories told by Margarita and Jaime mesh "scientific" narratives about the importance of Quilish with a world of spirits and agentive mountains. Both were necessary in order for stories about Cerro Quilish to travel outside the boundaries of Porcón and the Cajamarca region. While hydrological arguments appeal to universalizing ideals of science and environmentalism, testimonials of Cerro Quilish as an animate being appeal to the particularities of local knowledge. However, as I was constantly reminded in the field, what are usually thought of as "scientific" and "traditional" knowledge are both the result of global/local encounters that are unequal, unstable and have unpredictable effects.

Neither science nor local stories are fixed and unchanging. As they become part of new transnational contexts of global mining, environmentalism and cultural rights, they are transformed and, in turn, help transform those contexts with which they merge. Sometimes these different types of knowledge connect and sometimes they slide apart (Cruikshank 2005) but, as the Quilish case makes clear, these knowledges do not have to be based on shared interests or a common understanding of the world. Divergent knowledges can also communicate and come together in unexpected ways. One of the ways in which noncongruent knowledges came together in the Quilish controversy was in discussions around water. As I will show, arguments about the importance of Cerro Quilish as a water source were important for the campaigns against the mine, but they also helped further the interests of those in favour of the project.

Stabilizing Multiple Worlds

If the image of Cerro Quilish as an Apu held romantic appeal and added a new dimension to the antimining struggle, it was the language of aquifers that gave it scientific validity. One of the principal arguments made by activists who opposed the mining project was that the local population, both urban and rural, depended on this mountain for its water needs. Looking through papers he had collected over many years campaigning against Minera Yanacocha, Reinhart Seifert, thenpresident of the Cajamarca Defence Front, pulled out an old article from a local paper. He said this was where the first reference to Cerro Quilish as a mountain that "holds water" appeared. The 1996 article from a local weekly publication read: "Mayor Guerrero indicated that these mountains are the water 'sponges' or 'cushions' of the city of Cajamarca and showed concern over the possible activities of the mining company" (Clarín 1996). Having the city's mayor refer to Cerro Quilish as a water source was a major step in a campaign that gradually gained supporters.

Mr. Seifert had arrived from Germany in the 1980s to work for a development agency and made Cajamarca his permanent home. His radical antimining stance and fiery temperament made him a controversial figure among both critics and supporters of the mine. While recounting his involvement in the campaigns against Minera Yanacocha, he distinguished between the different strategies used to defend Mount Quilish: it was Father Arana, he told me, who embraced and helped disseminate the imagery of the sacred Apu; by contrast, he, as a scientist, was more interested in the technical arguments against mining. Their joint efforts—even if part of a sometimes conflictive relationship—are indicative of a wider network of collaboration that contributed to the effectiveness of the Quilish campaign. Even if

their interests did not always converge, an alliance was nevertheless possible.

Cerro Quilish's multiple forms-mineral deposit, Apu, sacred mountain, aguifer, "mountain that holds water" and so on-overlapped or diverged at various times throughout the conflict, and this flexibility was essential for making the struggle known beyond Cajamarca. National and international news stories that circulated about the Quilish protests consistently described the conflict as one that revolved around the defence of Cajamarca's primary source of water. For example, La República, a national daily with a liberal slant, referred to Cerro Quilish as an aquifer that supplies water to the city (La República 2004). Some national media reports mentioned the need to conduct hydrological and hydrogeological studies of the watershed before any exploration work could continue, a point that was written into an agreement between the mining company and local leaders that put an end to the protests (El Comercio 2004).

In missives from organizations such as Oxfam America and the international press, descriptions of Quilish as a source of water were often accompanied by references to its local significance as a sacred mountain. An article from AFP newswire stated that "campesinos justified their attitude [against exploration activity] alleging that the mountain is sacred and that the gods of Andean mythology (Apus) gave it to them 'in concession' to take care of them" (Cisneros 2004). In another article, titled "Protests Continue against Gold Prospecting on Sacred Peruvian Mountain," a journalist from the Associated Press wrote that Cerro Quilish was "historically considered an 'apu,' or deity, by local Indian communities" (Caso 2004). In the national press, the term Apu did not appear with great frequency, but the alleged sacredness of Cerro Quilish was nevertheless present in media coverage (e.g., Sandoval 2004) and influenced public opinion on the issue.

Before the Quilish protests, Apus and other entities were usually relegated to studies of "folklore" (or more recently, to tourism and to "New Age" and environmentalist discussions) but were not taken seriously in political debates. In addition, the idea that Cerro Quilish was an important aquifer set the conflict apart from earlier disputes around mining activity in the country. Certainly, water had previously been a concern in mining regions, particularly when rivers and streams were contaminated by mine runoff. However, the idea that a mountain needed to be protected *because* it was a source of water marked a shift in thinking about mining, water and the environment. Water helped make the Quilish

issue compelling and drew the support of people who did not necessarily identify with an "environmentalist" or "antimining" stance.

In part, the shift to discussions about water related to new technologies of open-pit mining that involve moving massive quantities of earth and using chemicals that could leach into bodies of water, as well as using large quantities of water in the mining process. In modern mines like Yanacocha, the unknown and unpredictable risks associated with mining operations are the most worrisome for neighbouring communities: the lowering of the water table, the reduction of water flows in rivers and irrigation canals and contaminants that are often undetectable to the naked eye. Once Cerro Quilish was identified as a key source of water for the region, these unseen and unforeseen hazards became more tangible. Activists used these arguments to put a stop to the project and made water a key element of future conflicts.

Quilish as Water

The Quilish antimining protests, unprecedented in the country's history, prompted Minera Yanacocha's withdrawal from Cerro Quilish. Bowing to public pressure, Minera Yanacocha asked the Ministry of Energy and Mines to revoke its exploration permit. Following the protests, the mining company emitted a communiqué in which it recognized its mistakes:

The events that took place in September have made us understand the true dimension of the preoccupations that our insistence to initiate exploration studies and activity in Quilish generated in the population, both in the countryside and the city.

We have listened to the preoccupations expressed by people of the countryside and the city, with regard to the quality and quantity of water. In this respect, we will work jointly with communities with the objective of obtaining an integral and transparent solution that will allow us to protect this precious resource. (Yanacocha 2004)

Activism against the Quilish project, including scientific arguments about the importance of Quilish as an aquifer, helped make water the common language in which mining issues were discussed. During the Quilish controversy and in subsequent mining conflicts, protestors maintained that extractive activity threatened the water supply of local communities. Another recurrent argument was that mining "at the headwaters of the river basin" (en cabecera de cuenca) would inevitably affect the water of communities downstream and should

not be permitted. Arguments about the reduction of water in irrigation canals, toxic pollution and the disappearance of lakes and water springs made water a central actor in protest actions against mining expansion.

The focus on water in mining debates emerged alongside a national concern about water issues that were not restricted to the impacts of extractive activity but ranged from potable water and sanitation in urban areas to global water scarcity and privatization. However, "water and mining" became a prominent theme in the many water-related conferences, forums and educational events that were organized in Cajamarca and throughout the country in the years following the Quilish protests. These conferences often saw the participation of international experts and key figures, such as Father Arana and spokespeople from the mining sector. In May 2007 in Cajamarca, for example, the "First Water Forum" (organized by a coalition of actors that included Minera Yanacocha) brought together representatives from corporations, government and civil society to discuss a water management strategy for the province. In several conferences on mining organized by NGOs, water also took precedence in the presentations and discussions.

While arguments about Cerro Quilish's role as a source of water contributed to an antimining discourse, Minera Yanacocha also began to give water more attention in its public relations campaigns. These campaigns transformed Cerro Quilish into an object for technical and scientific management and sought to counter criticisms against the mining company. Much of Minera Yanacocha's public relations work focused on water issues that activists themselves had helped introduce into the debate; for example, the company disputed the claim that mining processes compromise water availability for local communities. Instead, Minera Yanacocha's educational materials and public presentations suggested that the problem was not one of water scarcity but of water management. In its public relations materials, the company argued that Cajamarca had abundant water, but it was "lost" because it was not captured and used to its full advantage before it flowed into the sea.⁵ Thus, the solution lay in capturing more water by constructing water reservoirs, dykes and water tanks. Other company-sponsored projects focused on improving irrigation systems by lining canals to reduce water loss and introducing spray irrigation technologies. The company also invested in various participatory water monitoring programs that involved state institutions and local communities. These strategies reflected the company's efforts to promote an image of environmental responsibility, institutional transparency and public participation, all

legitimized by scientific arguments. This emphasis on the technical dimensions of water issues reduced the complexity of Cerro Quilish and facilitated the company's efforts to refocus the debate to emphasize the management of resources.

Although not everyone accepted Minera Yanacocha's claims of environmental responsibility, its focus on water management provided the company's supporters with arguments to delegitimize the opposition and posed an additional challenge for activists. After the events of 2004, the social movement "in defence of life" that Cerro Quilish had inspired became promptly fragmented. Those who continued to protest against the mine's effects on water quality and quantity or who mobilized to oppose other expansion projects, grew frustrated by the lack of popular support at marches and other organized events. Many of them felt that Minera Yanacocha had co-opted local leaders and that the promise of jobs and development projects had effectively neutralized any opposition in communities surrounding the mineincluding those in Porcón.

Conclusion

In her classic study, June Nash (1993) wrote about spirits and other beings that inhabit the mountains and have long been part of mining activity, engaged in complex negotiations with mine workers facing the dangers of the underground mines. Similarly, the Apu is part of a sentient, animate landscape disrupted by recent large-scale mining projects. However, Cerro Quilish did not already exist as an Apu according to a traditional "Andean cosmology"; rather, it came into public view through multiple interactions and knowledge practices that revolved around the antimining protests.

Father Arana's evocations of Cerro Quilish's "sacredness" resonated with urban residents, including those who shared his Catholic background. The protection of the environment from mining contamination, and the defence of Cerro Quilish in particular, came to be seen by some within this group as an intrinsic part of their Catholic duty. The idea of the "sacred" helped to translate the relationship between campesinos and Cerro Quilish into the language of Catholicism. At the same time, Cerro Quilish's identity as an Apu travelled beyond a religious audience, enrolling journalists, environmentalists and other supporters including campesinos themselves, who embraced Cerro Quilish's multiple forms in ways that helped to strengthen their claims.

The struggles over Cerro Quilish involved a large number of participants whose interests both overlapped and diverged in productive ways, contributing to the strength of the campaign against the mine. As I have tried to show in this article, Cerro Quilish's multiple forms made it possible for the campaign to draw a diverse base of supporters and travel through international activist and media networks. I am not suggesting that Quilish's multiplicity was planned or intentionally fabricated; rather, the various actors and events I have described helped shape and bring to the forefront the particular forms that Cerro Quilish was to take at various stages in the controversy.

When the movement was at its strongest, the multiplicity of Cerro Quilish posed a challenge for Minera Yanacocha, Yet, as I have sought to show, "making matter" requires continuous effort, and the precariousness of those multiple worlds became evident at times when the movements against mining expansion became fragmented and activism weakened. Arguments about water quality and quantity that antimining activists introduced into the debates, along with the mining industry's technocratic solutions centred on environmental management, had the effect of destabilizing Cerro Quilish's multiplicity and enabling a singular reality (water) to take hold. This singularity seemed to obscure (at least temporarily) other realities from view. Yet the potential for ongoing conflict remains, for those other realities do not cease to exist. An attention to multiple worlds reveals the collaborative processes of enactment that brings entities into being. Contemporary conflicts over mining can thus be understood as an ongoing process of contestation over socionatural worlds. This is always an unfinished process and will continue as Cerro Quilish's multiple forms are enacted and reenacted in an evolving context of mining expansion in Peru.

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Notes

- 1 At the time, the property of the mine covered more than 535 square miles (1,386 sq km) (Newmont Mining Corporation 2005). The mine is located within four major watersheds spanning the continental divide.
- 2 For an overview of anthropological engagements with the materiality of resources, see Richardson and Weszkalnys (2014).
- 3 All interview excerpts and quotes from print sources are my own translation from Spanish, the language that is primarily spoken in Cajamarca.
- 4 Liberation theology had a particularly strong influence in Cajamarca, in part as the legacy of José Dammert, Bishop of Cajamarca between 1962 and 1992. His work with the Rondas Campesinas and Cajamarca's rural poor inspired many people involved in social justice activism. Bishop Dammert was a mentor to Father Arana and created the Cristo Ramos Parish in Porcón in 1990, where Father Arana served as parish priest.
- 5 A 2007 advertisement by Minera Yanacocha reads: "We are collecting some of the water that Cajamarca looses at sea. There is [enough] water. Let's all think about how we can collect more of it." (Ya estamos juntando algo del agua que Cajamarca pierde en el mar. Agua hay. Pensemos todos en cómo juntamos más).

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